LISTING OF THE CLAIMS

This listing of the claims replaces all previous listings and versions:

1. (previously presented): A method to derive quantitative information from an x-ray image in a network environment comprising:

providing a digitized x-ray image on a local computer, wherein the x-ray image includes an image of bone;

transmitting the x-ray image to a remote computer; and

analyzing the x-ray image at the remote computer, thereby deriving quantitative information on bone from the x-ray image.

2. (original): The method of claim 1, wherein the analysis of the x-ray image comprises using a computer program on the remote computer.

3. (original): The method of claim 1, wherein said quantitative information is densitometric information.

4. (original): The method of claim 3, wherein said densitometric information is bone mineral density.

5 to 7. (canceled).

8. (previously presented): The method of claim 1, wherein said quantitative information is information on the morphology of the bone.

9. (original): The method of claim 8, wherein said information on the morphology of a structure is information on the two-dimensional arrangement of individual components forming said structure.

10. (original): The method of claim 8, wherein said information on the morphology of a structure is information on the three-dimensional arrangement of individual components forming said structure.

11. (canceled).

12. (previously presented): The method of claim 8, wherein said information is selected from the group consisting of trabecular thickness; trabecular spacing; two-dimensional or three-dimensional spaces between trabecular; two-dimensional or three-dimensional architecture of the trabecular network.

13. (original): The method of claim 1, further comprising transmitting x-ray acquisition parameters to the remote computer.

14. (original): The method of claim 13, wherein the x-ray acquisition parameters are transmitted prior to x-ray image.

15. (original): The method of claim 13, wherein the x-ray acquisition parameters are transmitted simultaneously with the x-ray image.

16. (original): The method of claim 13, wherein the x-ray acquisition parameters are transmitted after to the x-ray image.

17. (original): The method of claim 13, wherein the x-ray acquisition parameters are selected from the group consisting of x-ray tube voltage, x-ray energy, x-ray tube current, film-focus distance, object-film distance, x-ray collimation, focal spot size, spatial resolution of the x-ray system, filter technique, and film-focus distance.

18. (original): The method of claim 1, wherein the x-ray image further comprises one or more internal standards.

19. (original): The method of claim 18, wherein the internal standard is density of a tissue of a human or air surrounding a structure.

20. (original): The method of claim 19, wherein the internal standard is density of a tissue and the tissue is selected from the group consisting of subcutaneous fat, bone and muscle.

21. (original): The method of claim 1, wherein the information is encrypted prior to

transmission.

22. (original): The method of claim 1, further comprising generating a diagnostic report based on the quantitative information.

23. (original): The method of claim 22, wherein said diagnostic report provides information on a patient's state of health.

24. (original): The method of claim 23, wherein the state of health is selected from the group consisting of bone mineral density status and fracture risk.

25. (original): The method of claim 23, further comprising generating a bill for the diagnostic report.

26. (original): The method of claim 25, wherein the bill is generated by a computer program on the remote computer.

27. (original): The method of claim 1, wherein the x-ray image is an x-ray film.

28. (original): The method of claim 27, wherein the x-ray film image is digitized.

29. (original): The method of claim 28, wherein the film is digitized using a scanning unit.

30. (original): The method of claim 27, wherein said x-ray film image is acquired digitally.

31. (original): The method of claim 30, wherein the digital x-ray film image is acquired using a selenium detector system or a silicon detector system.

32. (original): An x-ray assembly for determining bone mineral density comprising
an x-ray film holder
x-ray film and

a calibration phantom comprising at least one marker positioned in an area of known density.

33. (original): The assembly according to claim 32, wherein the calibration phantom projects free of bone tissue.

34. (original): The assembly of claim 32, wherein the calibration phantom is attached to the x-ray film holder or a detector system.

35. (original): The assembly of claim 32, wherein the calibration phantom is integral to the x-ray film holder.

36. (original): The assembly of claim 32, wherein the x-ray assembly is a dental x-ray assembly.

37. (original): assembly of claim 32, wherein the calibration phantom comprises a stepwedge.

38. (original): The assembly of claim 32, wherein the calibration phantom comprises a plurality of fluid-filled chambers.

39. (original): The assembly of claim 32, wherein the marker is a geometric pattern selected from the group consisting of circles, stars, squares, crescents, ovals, multiple-sided objects, irregularly shaped objects and combinations thereof.

40. (original): An x-ray assembly for determining bone mineral density comprising
an x-ray film holder
x-ray film and
a calibration phantom comprising at least one marker positioned in an area of known density, wherein the calibration phantom is attached to the x-ray film.

41. (original): The assembly of claim 39, wherein the calibration phantom is integral to the x-ray film.

42. (original): The assembly of claim 41, wherein the calibration phantom is included between two of the physical layers of the x-ray film.

43. (original): The assembly of claim 41, wherein the calibration phantom is included within one of the physical layers of the x-ray film.

44. (original): A method of accurately determining bone mineral density of an x-ray image, the method comprising:

providing an assembly according to claim 32, wherein the calibration phantom is positioned such that x-rays pass through a subject and the calibration phantom simultaneously, wherein the calibration phantom projects free of materials that alter its' apparent density;

creating an image of the phantom and the portion of the subject's anatomy; and

comparing the image of the phantom and the subject's anatomy to determine bone mineral density of the subject.

45. (original): The method of claim 44, wherein the x-ray image is a dental x-ray.

46. (original): The method of claim 44, wherein said comparing is performed in a network environment.

47. (original): A kit comprising a calibration phantom with an integrated geometric pattern; an x-ray imaging assembly and computer programs, wherein said computer programs analyze and assess bone mineral density.

48. (original): A method of diagnosing osteoporosis comprising analyzing an x-ray obtained by the method of claim 1.

49. (original): A method of treating osteoporosis comprising diagnosing osteoporosis according to the method of claim 48 and administering a suitable treatment.

50. (original): The method of claim 49, wherein the treatment comprises administering an anti-resorptive agent or an anabolic agent.